



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,842	06/20/2001	Rosario Cincimino	US20000147	5011

173 7590 04/16/2003

WHIRLPOOL PATENTS COMPANY - MD 0750
500 RENAISSANCE DRIVE - SUITE 102
ST. JOSEPH, MI 49085

EXAMINER

PERRIN, JOSEPH L

ART UNIT	PAPER NUMBER
----------	--------------

1746

6

DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,842

Applicant(s)

CIANCIMINO ET AL.

Examiner

Joseph Perrin, Ph.D.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,765,161 to Williamson.

Re claims 1-6, Williamson discloses a method of washing fabric goods in an automatic (vertical or horizontal) washing machine including the steps of charging (loading) the washing machine drum 10 with fabric goods (for instance, col. 1, line 14 *et seq.*), rotating the drum about an axis (wash cycle) (for instance, col. 1, line 17 *et seq.*), accelerating the rotation of the vessel to desired speeds (for instance, col. 1, line 29 *et seq.*), and determining an amount of energy (*i.e.* motor current which “varies as a function of torque...resulting from load unbalance”) comparing the energy to a predetermined value and sending an “unbalance control” signal (for instance, col. 2, line 20 *et seq.*).

Re claim 7, Williamson further discloses the step of determining an amount of energy to include isolating a frequency of the current as claimed (for instance, col. 4, line 11 *et seq.*).

Re claims 9-15 & 20, Williamson discloses an automatic washing machine (vertical or horizontal) having a rotatable vessel (drum 10), and an “out-of-balance

Art Unit: 1746

control" control 20 capable of determining motor current and indicating an "unbalance control" signal when the load unbalance exceeds a preset limit." (for instance, col. 1, line 14 *et seq.* & col. 4, line 11 *et seq.*).

Re claims 16-17, Williamson discloses the claimed controlled induction motor with inverter, current measuring device, and digital filter (for instance, col. 5, line 3 *et seq.*).

Re claims 18-19, Williamson discloses the "out-of-balance control" signal as an electrical signal which "reduces the drum rotation" (*i.e.* visible signal to a user) (for instance, col. 7, line 10 *et seq.*).

Recitation of the above reads on the claimed subject matter.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2003/0056302 to Broker *et al.*, which discloses a washing machine unbalance detection system, having a filing date after applicant's filing date.

US 2002/0016997 to Jonsson, which discloses a low-speed prebalancing washing machine that predicts load unbalance.

US 6,442,979 to Thorn *et al.*, which discloses a washing machine motor control device.

US 6,418,581 to Bruce *et al.*, which discloses a control system for measuring load imbalance in a washing machine.

US 6,393,918 to French *et al.*, which discloses a method and apparatus for detecting an imbalance condition in a washing machine.

US 6,381,791 to French *et al.*, which discloses a method and apparatus for controlling the rotation in a washing machine and calculating speed error.

US 6,282,965 to French *et al.*, which discloses a method and apparatus for detecting an imbalance condition in a washing machine.

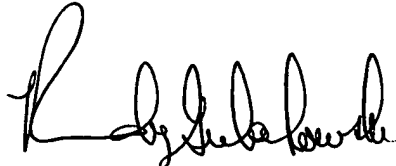
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Perrin, Ph.D. whose telephone number is (703)305-0626. The examiner can normally be reached on M-F 7:30-5:00, except alternate Fridays.

5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (703)308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

6. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Joseph Perrin, Ph.D.
Examiner
Art Unit 1746

jlp
April 8, 2003



RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700